

C L A I M S

We claim:

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1. A method of performing a research task within a searchable database comprising the steps of:
  - a. utilizing a selective one or more search methodologies including keyword search, hierarchical search, and dichotomous key search to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database;
  - b. utilizing a selective one or more search methodologies including keyword search, hierarchical search, and dichotomous key search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and
  - c. repeating step (b) until the research task is completed.
2. The method as claimed in claim 1 further comprising the step of utilizing a parametric search as one of the available search methodologies.
3. The method as claimed in claim 2 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.
4. The method as claimed in claim 1 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.
- 30 5. The method as claimed in claim 1 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

6. The method as claimed in claim 1 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

5        7. The method as claimed in claim 1 wherein the searchable database is distributed into more than one physical location.

10      8. The method as claimed in claim 1 wherein the steps of utilizing the search methodologies are performed by a server.

15      9. The method as claimed in claim 8 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

20      10. The method as claimed in claim 9 wherein the internet connection is established with a computer system at a remote location from the server.

25      11. The method as claimed in claim 1 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

30      12. The method as claimed in claim 11 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

35      13. The method as claimed in claim 11 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.

40      14. The method as claimed in claim 13 wherein the step of maintaining the node is performed by a node owner who maintains the node and all nodes that are linked beneath the corresponding node within the directory tree structure.

15. A research system for performing a research task within a searchable database comprising a research server configured to utilize a selective one or more search methodologies including keyword search, hierarchical search, and dichotomous key search, to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, to utilize a selective one or more search methodologies including keyword search, hierarchical search, and dichotomous key search, to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of a selective one or more search methodologies including keyword search, hierarchical search, and dichotomous key search, to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed.

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16. The research system as claimed in claim 15 wherein one of the search methodologies utilized by the research server is a parametric search.

17. The research system as claimed in claim 15 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

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18. The research system as claimed in claim 17 wherein the connection is established with the computer system at a remote location from the interface circuit.

19. The research system as claimed in claim 18 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

20. The research system as claimed in 15 wherein the searchable database is distributed into more than one physical location.

5        21. The research system as claimed in 15 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

10      22. The research system as claimed in 21 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

15      23. The research system as claimed in 21 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

20      24. The research system as claimed in 23 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

25      25. A method of performing a research task within a searchable database comprising the steps of:

- a. utilizing a selective one or more search methodologies including keyword search, hierarchical search, and parametric search to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database;
- b. utilizing a selective one or more search methodologies including keyword search, hierarchical search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and
- c. repeating step (b) until the research task is completed.

26. The method as claimed in claim 25 further comprising the step of utilizing a dichotomous key search as one of the available search methodologies.

27. The method as claimed in claim 26 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

28. The method as claimed in claim 25 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

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29. The method as claimed in claim 25 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.

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30. The method as claimed in claim 25 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

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31. The method as claimed in claim 25 wherein the searchable database is distributed into more than one physical location.

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32. The method as claimed in claim 25 wherein the steps of utilizing the search methodologies are performed by a server.

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33. The method as claimed in claim 32 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

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34. The method as claimed in claim 33 wherein the internet connection is established with a computer system at a remote location from the server.

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35. The method as claimed in claim 25 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

36. The method as claimed in claim 35 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

5       37. The method as claimed in claim 35 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.

10      38. The method as claimed in claim 37 wherein the step of maintaining the node is performed by a node owner who maintains the node and all nodes that are linked beneath the corresponding node within the directory tree structure.

15      39. A research system for performing a research task within a searchable database comprising a research server configured to utilize a selective one or more search methodologies including keyword search, hierarchical search, and parametric search to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, to utilize a selective one or more search methodologies including keyword search, hierarchical search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of a selective one or more search methodologies including keyword search, hierarchical search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed.

20      40. The research system as claimed in claim 39 wherein one of the search methodologies utilized by the research server is a dichotomous key search.

41. The research system as claimed in claim 39 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

5       42. The research system as claimed in claim 41 wherein the connection is established with the computer system at a remote location from the interface circuit.

10      43. The research system as claimed in claim 42 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

15      44. The research system as claimed in 39 wherein the searchable database is distributed into more than one physical location.

20      45. The research system as claimed in 39 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

25      46. The research system as claimed in 45 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

30      47. The research system as claimed in 45 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

48. The research system as claimed in 47 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

49. A method of performing a research task within a searchable database comprising the steps of:

      a. utilizing a selective one or more search methodologies including keyword search, dichotomous key search, and parametric search to correlate a search criteria to the

searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database;

5           b. utilizing a selective one or more search methodologies including keyword search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and

10           c. repeating step (b) until the research task is completed.

50. The method as claimed in claim 49 further comprising the step of utilizing a hierarchical search as one of the available search methodologies.

15           51. The method as claimed in claim 50 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

52. The method as claimed in claim 49 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

20           53. The method as claimed in claim 49 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

25           54. The method as claimed in claim 49 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.

55. The method as claimed in claim 49 wherein the searchable database is distributed into more than one physical location.

30           56. The method as claimed in claim 49 wherein the steps of utilizing the search methodologies are performed by a server.

57. The method as claimed in claim 49 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

5 58. The method as claimed in claim 57 wherein the internet connection is established with a computer system at a remote location from the server.

10 59. The method as claimed in claim 49 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

15 60. The method as claimed in claim 59 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

20 61. The method as claimed in claim 59 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.

62. The method as claimed in claim 61 wherein the step of maintaining the node is performed by a node owner who maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

25 63. A research system for performing a research task within a searchable database comprising a research server configured to utilize a selective one or more search methodologies including keyword search, dichotomous key search, and parametric search to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, to utilize a selective one or more search methodologies including keyword search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of a selective one or more search

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methodologies including keyword search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the  
5 subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed.

10 64. The research system as claimed in claim 63 wherein one of the search methodologies utilized by the research server is an hierarchical search.

15 65. The research system as claimed in claim 63 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

16 66. The research system as claimed in claim 65 wherein the connection is established with the computer system at a remote location from the interface circuit.

20 67. The research system as claimed in claim 66 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

25 68. The research system as claimed in 63 wherein the searchable database is distributed into more than one physical location.

69. The research system as claimed in 63 wherein the searchable database is formatted in a  
25 directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

30 70. The research system as claimed in 69 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

71 The research system as claimed in 69 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

5 72. The research system as claimed in 71 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

10 73. A method of performing a research task within a searchable database comprising the steps of:

15 a. utilizing a selective one or more search methodologies including hierarchical search, dichotomous key search, and parametric search to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database;

20 b. utilizing a selective one or more search methodologies including hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and

25 c. repeating step (b) until the research task is completed.

74. The method as claimed in claim 73 further comprising the step of utilizing a keyword search as one of the available search methodologies.

25 75. The method as claimed in claim 74 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.

30 76. The method as claimed in claim 73 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

77. The method as claimed in claim 73 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

5       78. The method as claimed in claim 73 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

10      79. The method as claimed in claim 73 wherein the searchable database is distributed into more than one physical location.

80. The method as claimed in claim 73 wherein the steps of utilizing the search methodologies are performed by a server.

15      81. The method as claimed in claim 80 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

82. The method as claimed in claim 81 wherein the internet connection is established with a computer system at a remote location from the server.

20      83. The method as claimed in claim 73 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

25      84. The method as claimed in claim 83 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

85. The method as claimed in claim 83 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.

86. The method as claimed in claim 85 wherein the step of maintaining the node is performed by a node owner who maintains the node and all nodes that are linked beneath the corresponding node within the directory tree structure.

5       87. A research system for performing a research task within a searchable database comprising a research server configured to utilize a selective one or more search methodologies including hierarchical search, dichotomous key search, and parametric search to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, to utilize a selective one or more search methodologies including hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of a selective one or more search methodologies including hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed.

15           88. The research system as claimed in claim 87 wherein one of the search methodologies utilized by the research server is a keyword search.

20           89. The research system as claimed in claim 88 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

25           90. The research system as claimed in claim 89 wherein the connection is established with the computer system at a remote location from the interface circuit.

91. The research system as claimed in claim 90 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

5       92. The research system as claimed in 87 wherein the searchable database is distributed into more than one physical location.

10      93. The research system as claimed in 87 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

15      94. The research system as claimed in 93 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

20      95. The research system as claimed in 93 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

96. The research system as claimed in 95 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.